1. A photothermographic material comprising, on one side of a support, a photosensitive silver halide, a non-photosensitive silver salt of an organic acid, a reducing agent for silver ions and a binder, which is characterized by containing one or more o-polyphenol compounds;

and one or more compounds wherein all of said one or more compounds satisfy the following requirements A and B

A: the compound has a hydrogen bond formation rate constant Kf that is 20-4000,

B: the compound is represented by the following formula (II), (III), (IV) or (V), or the compound has a phosphoryl group:

$$R^{21}$$
 R^{22}
 R^{23}
 R^{31}
 R^{32}
 R^{31}
 R^{32}
 R^{32}
 R^{41}
 R^{43}
 R^{41}
 R^{42}
 R^{51}
 R^{54}
 R^{55}
 R^{55}

wherein:

in the formula (II), R^{21} and R^{22} independently represent an alkyl group, and R^{23} represents an alkyl group, an aryl group or a heterocyclic group, and two or more of R^{21} , R^{22} and R^{23} may be taken together to form a ring;

in the formula (III), R^{31} and R^{32} independently represent an alkyl group, an aryl group or a heterocyclic group, and R^{31} and R^{32} may be taken together to form a ring;

in the formula(IV), R^{41} and R^{42} independently represent an alkyl group, an aryl group or a heterocyclic group, R^{43} represents an alkyl group, an aryl group, a heterocyclic group or N-(R^{44})(R^{45}) where R^{44} and R^{45} independently represent an alkyl group, an aryl group or a heterocyclic group, and two or more of R^{41} , R^{42} , R^{43} , R^{44} and R^{45} may be taken together to form a ring;

and in the formula (V), R^{51} , R^{52} , R^{53} , R^{54} and R^{55} independently represent a hydrogen atom or a substituent and two or more of R^{51} , R^{52} , R^{53} , R^{54} and R^{55} may be taken together to form a ring.

2. The photothermographic material according to claim 1, wherein at least one of the o-polyphenol compounds is represented by the following formula I

$$R^{8}$$
 R^{7}
 R^{6}
 R^{5}
 R^{4}
 R^{3}
 R^{2}

(I)

wherein R², R⁴, R⁵, and R⁷ are hydrogen atoms, R¹ and R⁸ represent an alkyl group and R³ and R⁶ represent an alkyl group, and L represents a group –CHR⁹ where R⁹ represents a hydrogen atom, a methyl group, an ethyl group, an isopropyl group, an n-propyl group, a heptyl group, a 1-ethylpentyl group, and an undecyl group.

- 3. The photothermographic material according to claim 1 or 2, wherein the hydrogen bond formation rate constant Kf is 70 to 4000.
- 4. The photothermographic material according to claim 1 or 2, wherein the hydrogen bound formation rate constant Kf is 100-4000.
- 5. The photothermographic material according to claim 1 or 2, wherein the hydrogen bound formation rate constant Kf is 250-2000.
- 6. The photothermographic material according to claim 1 or 2, wherein the compound of the requirement B is represented by the formula (II).
- 7. The photothermographic material according to claim 1 or 2, wherein the compound of the requirement B is represented by the formula (III).
- 8. The photothermographic material according to claim 1 or 2, wherein the compound of the requirement B is represented by the formula (IV).
- 9. The photothermographic material according to claim 2, wherein the compound of the requirement B is represented by the formula (V).
- 10. The photothermographic material according to claim 1 or 2, wherein the amount of the o-polyphenol compound is $0.01-40~g/m^2$.
- 11. The photothermographic material according to claim 1 or 2, wherein the amount of all of said one or more satisfy the requirement A and B is $0.01-40g/m^2$.

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